

APPRENTICESHIP-BASED  
**BACHELOR OF MANAGEMENT STUDIES**  
IN E COMMERCE



**REGULATION & CURRICULUM**  
VERSION 2020-21



APPRENTICESHIP-BASED  
BACHELOR OF MANAGEMENT STUDIES  
IN E COMMERCE

*COLLABORATIVE PROGRAMME OF LSC*

**REGULATION & CURRICULUM**

**VERSION 2020-21**

© Logistics Sector Skill Council

Collaborating Institution may change the curriculum and assessment system in consultation with LSC.

# APPRENTICESHIP-BASED BACHELOR OF MANAGEMENT STUDIES IN E COMMERCE

## COLLABORATIVE PROGRAMME OF LSC

### The Programme

Logistics Sector Skill Council (LSC), established by the Ministry of Skill Development and Entrepreneurship (MSDE) through National Skill Development Corporation of India (NSDC), has taken up a number of initiatives with the objective of creating adequate skills for gainful employment at various levels in the Logistics Industry.

Apprenticeship-based BMS Degree Programme in E-Commerce is offered by Logistics Sector Skill Council in collaboration with approved Higher Education Institutions.

The Programme is conducted in approved Higher Education Institutions (hereinafter referred to as 'Collaborating Institutions') under active collaboration with LSC, on signing MoU. LSC takes responsibility for the following processes to make the programme successful.

- Curriculum Development and Continuous Improvement
- Faculty & staff Training
- Sensitisation of Students on Apprenticeship Assignment
- Securing Apprenticeship Training (On-the-job Training) in Logistics Companies for all students of this Degree programme under the provisions of Apprentices Act, 1961
- Securing a monthly stipend, as prescribed by the Apprenticeship Act 1961, during the Apprenticeship period for every student.
- Assisting the CI in sourcing Guest Faculty
- Assessing the performance & learning of students while in Apprenticeship
- Arranging for final placement drive inviting core companies to enable all eligible students to get full time employment
- Assessment of the progress made by the CI in the Programme, and offering suggestions & help to achieve the objective of churning out skilled graduates

The Regulation and Curriculum given below are duly approved by the University with which the CI is affiliated with, and are applicable to all candidates admitted in the programme.

### 1. Eligibility for Admission

Candidates for admission to the Apprenticeship-based BMS Degree Programme in E-Commerce Operations shall have passed +2 in any discipline with not less than 50% marks from a recognised Board. The student should have passed either 'Mathematics' or 'Business Statistics' or 'Business Mathematics' as one of the subjects in +2.

### 2. Admission

Admission is based on the marks in the qualifying examination, and on the prevailing reservation norms of the State in which the CI functions.

### 3. Programme Duration

The Programme extends over a period of three years under semester pattern comprising SIX semesters.

### 4. Programme Content

- 28 Core Courses spread equally in Semesters I, II, III, and IV
- A total of 7 Practical Courses scheduled in Semesters I, II, V and VI
- 2 Allied Courses under MOOC format (one each in Semesters V and VI)
- 2 Spells of Apprenticeship Training of six months each in Semesters V and VI

### 5. Standard of Passing & Award Division

- a. Students shall have a minimum of 50% of total marks of the University examinations in each Course, subject to the condition that the students secure a minimum of 60% marks in each level of Apprenticeship. The overall passing minimum is 50% both in aggregate of and separately in Continuous Internal Assessment and External Examination in each Course.
- b. A candidate who secures 50% or more marks but less than 60% of the aggregate marks, shall be awarded the Degree with the gradation of 'SECOND CLASS'.
- c. A candidate, who secures 60% or more of the aggregate marks, shall be awarded the Degree with the gradation of 'FIRST CLASS'.

*(Note: The CI may follow its own norms / practices in this regard.)*

## 6. Continuous Internal Assessment

- Continuous Internal Assessment for each Course shall be by means of Written Tests, Assignments, and Class Tests for a total mark of 50.
- Two Internal Tests of 2 hours each may be conducted during the Semester for each Course and the best mark out of the two may be considered. One Model Examination may be conducted at the end of each Semester prior to University examinations. Students may be asked to submit at least three assignments in each Course.
- Continuous Internal Assessment for each Course shall be the responsibility of the concerned Course Faculty.
- The Continuous Internal Assessment marks are to be submitted to the University at the end of every Semester, as per the norms and Exam Calendar of the University with which the CI is affiliated with.
- The valued answer papers/assignments shall be given to the students after the valuation is completed and they are asked to check and satisfy themselves about the marks they scored.
- Assessment of the students on their Apprenticeship is taken care of by LSC involving a Team of three experts consisting of a faculty member in CI, Industry Mentor, and an External Expert (either from industry or academia).
- All records in respect of Continuous Internal Assessments shall be in the safe custody of the CI for at least one year after the assessment.

*(Note: The CI may follow its own norms / practices in this regard.)*

## 7. Attendance

Students must have earned 85% of attendance in each Course for appearing for the examination.

- Lack of attendance to the extent of 10% may be condoned on application and payment of prescribed fee.
- Lack of attendance beyond 10% but below 20% may be condoned on application with Medical Certificate and payment of prescribed fee.
- Students who lack attendance beyond 20% are not eligible to appear for Examinations. Such students shall redo the concerned Semester after the completion of Programme Period.
- Attendance requirement during each level of Apprenticeship is per the conditions/norms of Apprenticeship Act and the Companies to which students are placed.

*(Note: The CI may follow its own norms / practices for 7a. b. and c.)*

## 8. Examination

The Collaborating Institution or the University to which the CI is affiliated will conduct the examination for all courses scheduled in Semesters I, II, III, and IV. as per its norms.

## 9. Pattern of Question Paper

Part	Question Type	No. of Questions	Mark per Question	Total Marks
A	Multiple Choice Questions with varied levels of difficulty	10 (Without any Choice)	1	10
B	Descriptive Questions	5 (Out of 7 Questions)	8	40
C	Essay Answer Question	1 (Without any Choice)	25	25
	Total			75

*(Note: The CI may follow its own pattern of examinations as per its norms / practices.)*

## 10. Miscellaneous

- Each student shall possess prescribed textbooks for all Courses.
- The CI / University will issue Identity Cards to all students.
- The University will award students, who successfully complete the Programme within the stipulated period, the degree.

## 11. Fee Payment

The Programme Fee and Examination Fee are payable to the CI as per its norms.

## 12. Batch Size

The CI, as per the MoU signed with LSC, shall admit one section of students per Year with a maximum intake of 60 students. The CI shall strictly follow the norms of the University to which it is affiliated as far as the intake capacity of students.

## 13. Other Regulations

Besides the above, the other regulations of the University shall also be applicable to this programme.

**14. Eligibility for Degree**

Students shall have undergone the prescribed programme of study in the CI for not less than three academic years comprising 6 semesters, passed the examinations prescribed, and fulfil such conditions as have been prescribed therefor.

**15. Programme Structure****BMS (E Commerce) Curriculum Structure**

Sem.	NSQF	No.	Course	Code	Type	Hours	Credit	CIA	ESE	Marks
I	3	1	Language	LEC2001	General	45	3	25	75	100
		2	Statistics for Data Analysis	LEC2002	General	60	4	25	75	100
		3	Analysing Financial Accounting Statements	LEC2003	General	60	4	25	75	100
		4	Inventory Management	LEC2004	General	60	4	25	75	100
		5	Introduction to E Commerce Logistics	LEC2005	General	45	3	25	75	100
		6	Word & Presentation Tools - Practical	LPE2001	Skill	60	2	25	75	100
		7	Communicative English - Practical	LPE2002	Skill	60	2	25	75	100
		Total				390	22	175	525	700

Sem.	NSQF	No.	Course	Code	Type	Hours	Credit	CIA	ESE	Marks
II	3	1	Organisation Behaviour	LEC2006	General	45	3	25	75	100
		2	Environmental Studies	LEC2007	General	45	3	25	75	100
		3	Quantitative Techniques	LEC2008	General	60	4	25	75	100
		4	Warehouse Management	LEC2009	Skill	45	3	25	75	100
		5	Material Handling	LEC2010	Skill	45	3	25	75	100
		6	First Mile Operations	LEC2011	Skill	60	4	25	75	100
		7	Data Analysis using SpreadSheet - Practical	LPE2003	Skill	60	2	25	75	100
		Total				360	22			700

Sem.	NSQF	No.	Course	Code	Type	Hours	Credit	CIA	ESE	Marks
III	4	1	Cost Accounting	LEC2012	General	60	4	25	75	100
		2	Marketing Management	LEC2013	General	45	3	25	75	100
		3	MIS for E Commerce	LEC2014	Skill	60	4	25	75	100
		4	E Commerce Logistics Operations	LEC2015	Skill	60	4	25	75	100
		5	Transportation for E Commerce	LEC2016	Skill	45	3	25	75	100
		6	Reverse Logistics for E Commerce	LEC2017	Skill	45	3	25	75	100
		7	Last Mile Operations	LEC2018	Skill	45	3	25	75	100
		Total				360	24			700

Sem.	NSQF	No.	Course	Code	Type	Hours	Credit	CIA	ESE	Marks
IV	4	1	Management Accounting	LEC2019	General	60	4	25	75	100
		2	Human Resources Management	LEC2020	General	45	3	25	75	100
		3	Hub & Line Operations	LEC2021	Skill	60	4	25	75	100
		4	E Commerce Customer Service	LEC2022	Skill	45	3	25	75	100
		5	Outsourcing in E Commerce	LEC2023	Skill	45	3	25	75	100
		6	Fulfillment Operations	LEC2024	Skill	45	3	25	75	100
		7	Packaging for E Commerce	LEC2025	Skill	45	3	25	75	100
		Total				345	23			700

Sem.	NSQF	No.	Course	Code	Type	Hours	Credit	CIA	ESE	Marks
V	5	1	Allied Course 1	LEA2001/02	General	60	2	50	50	100
		2	Inventory Management - Practical	LPE2004	Skill	60	2	25	75	100
		3	Warehouse Management - Practical	LPE2005	Skill	60	2	25	75	100
		4	Apprenticeship I	LEC2026	Skill	1008	22	250	150	400
		Total				1188	28			700

Sem.	NSQF	No.	Course	Code	Type	Hours	Credit	CIA	ESE	Marks
VI	5	1	Allied Course 2	LEA2003/04	General	60	2	50	50	100
		2	MIS for E Commerce - Practical	LPE2006	Skill	60	2	25	75	100
		3	Fulfillment Operations - Practical	LPE2007	Skill	60	2	25	75	100
		4	Apprenticeship II	LEC2027	Skill	1008	22	250	150	400
		Total				1188	28			700

**List of Allied Courses**

Sem.	No.	Course	Code	Type	Hours	Credit	CIA	ESE	Marks
V	1	Revenue Management & Pricing	LEA2001	General	60	2	50	50	100
	2	Principles of Cataloguing	LEA2002	General	60	2	50	50	100

Sem.	No.	Course	Code	Type	Hours	Credit	CIA	ESE	Marks
VI	1	Regulatory Environment of E Commerce	LEA2003	General	60	2	50	50	100
	2	International E Commerce	LEA2004	General	60	2	50	50	100

- Note
- 1 CIA Mark for Apprenticeship will be provided by LSC.
  - 2 Exam on Apprenticeship comprises Report Evaluation, and Viva - conducted by Collaboration Inst.
  - 3 Appropriate QP will be embedded in Apprenticeship Training to make the graduates industry-ready.

**Credit Distribution**

Semester	General		Skill		Total	
	Courses	Credits	Courses	Credits	Courses	Credits
I	5	18	2	4	7	22
II	3	10	4	12	7	22
III	2	7	5	17	7	24
IV	2	7	5	16	7	23
V	1	2	3	26	4	28
VI	1	2	3	26	4	28
<b>Total</b>	<b>14</b>	<b>46</b>	<b>22</b>	<b>101</b>	<b>36</b>	<b>147</b>

% of General Courses: 31

% of Skill Courses: 69

**Awards at the end of each Year**

Year	General	Skill	QP	Sem.	Award
1	28	16	1	2	Diploma
2	14	33	1	4	Ad. Dip.
3	4	52	1	6	Degree
<b>Total</b>	<b>46</b>	<b>101</b>	<b>3</b>		



**LANGUAGE**

<i>Semester</i> I	<i>Course Type</i> Core	<i>Code</i> LEC2001	<i>Hours</i> 45	<i>Credits</i> 3	<i>Version</i> 2020-21
----------------------	----------------------------	------------------------	--------------------	---------------------	---------------------------

(To be developed by the Collaborating Institution)

**STATISTICS FOR DATA ANALYSIS**Semester  
ICourse Type  
CoreCode  
LEC2002Hours  
60Credits  
4Version  
2020-21**COURSE OBJECTIVES:**

- This course aims at aiding the students in reaching a level of increased competence in business statistics and expands understanding of the applications of statistical concepts in business.
- Emphasis is placed upon learning statistical concepts through common business problems.

**LEARNING OUTCOMES:**

- Gain conceptual and working knowledge of Business Statistics and use it in the applications of business.
- Learn the methods of solving problems on basic concepts and analytical business statistical model.
- Enable the student to use introductory level of Transportation and queuing theory.

Unit	Topics
I	Data Collection Collection and Presentation of Data - Statistical data – Primary and Secondary; Methods of collection of Primary data; Presentation of Data – Textual, Tabular and Diagrammatic form (Line chart, Bar chart, Pie chart, Histogram, Frequency polygon and Ogive); Frequency distribution.
II	Measures of Central Tendency Measures of Central Tendency – Mean (A.M., G.M., H.M.), Median, Mode – different properties; Partition values – Quartiles, Deciles, Percentiles; Partition values from Ogives. Measures of Dispersion – Range, Q.D., M.D., S.D. – their coefficients; Comparing consistency; Different properties. Moments, Skewness and Kurtosis – Moments about an arbitrary number; Central Moments; Relation between central and non-central moments up to 4th order and coefficients.
III	Correlation Analysis: Methods of Studying Correlation for Grouped and Ungrouped Frequency Conceptual Distribution. Regression Analysis: Equation of Regression Lines for Grouped and Ungrouped Frequency Distribution, Standard Error Estimate.
IV	Index Number Index Number – Construction, Price and Quantity index numbers, Laspeyres', Paasche's, Edgeworth- Analytical Marshall's, Fisher's method, Relative methods, Tests of index number formulae: Time and Factor reversal tests, General index number, Chain base index number, cost of living index number (CLI), Uses of CLI and its applications, Uses and limitations of index numbers.
V	Probability and Sampling Probability theory – concept and approaches; Probability rules – addition Analytical and multiplication theorem, Binomial, Poisson and Normal Distribution and their applications Sampling – Purpose and Methods of Sampling, Merits and limitations of Sampling.

**Textbooks & Suggested Readings:**

1. Gupta and Gupta, Business Statistics. (Sultan Chand & Sons: New Delhi).
2. Chandan, J. Statistics for Business Economics. (Vikas: New Delhi)
3. Sharma, Shenoy and Srivastava, Quantitative Analysis for Managerial Decision Making

**ANALYSING FINANCIAL ACCOUNTING STATEMENTS**Semester  
ICourse Type  
CoreCode  
LEC2003Hours  
60Credits  
4Version  
2020-21**COURSE OBJECTIVES:**

- To familiarize students with the mechanics of preparation of financial statements, understanding corporate financial statements, their analysis and interpretation

**LEARNING OUTCOMES:**

- Apply fundamental accounting concepts, principles and conventions
- Record basic accounting transactions and prepare annual financial statements for a sole proprietorship business
- Record accounting transactions on the dissolution, amalgamation, and sale of partnership firms

Unit	Topics
I	<p>(a) Theoretical Framework:</p> <p>Introduction to Financial Accounting- Accounting as an Information System - its Importance, Scope and Limitations; Users of Accounting Information; Basic concepts and conventions: entity, money measurement, going concern, cost realization, accruals, periodicity, consistency, prudence (conservatism), materiality and full disclosures.</p> <p>(b) Accounting Process:</p> <p>The Accounting Equation; Recording of business transactions and preparation of Trial Balance; Recording of transactions in Cash Book and in Subsidiary Books – Purchase Book, Purchase Returns Book, Sales Book, and Sales Returns Book; Opening and Closing Entries.</p>
II	<p>(a) Business Income</p> <p>(i) Capital and revenue expenditures and receipts;</p> <p>(ii) Revenue recognition and recognition of expenses</p> <p>(iii) Depreciation: concept of depreciation; Factors in the measurement of depreciation; Methods of computing depreciation: straight line method and diminishing balance method; change of methods.</p> <p>(b) Final Accounts:</p> <p>Preparing Trading Account, Profit &amp; Loss Account and Balance Sheet for a Sole Proprietor.</p>
III	<p>Accounting for Hire Purchase and Instalment Systems:</p> <p>Calculation of interest, partial and full repossession, Hire purchase trading (total cash price basis), stock and debtors' system; Concepts of operating and financial lease (theory only)</p>
IV	<p>Accounting for Inland Branches</p> <p>Concept of dependent branches; accounting aspects; debtors' system, stock and debtors' system, branch final accounts system and wholesale basis system. Independent branches: concept-accounting treatment: important adjustment entries and preparation of consolidated profit and loss account and balance sheet.</p>
V	<p>Accounting for Dissolution of the Partnership Firm Accounting of Dissolution of the Partnership Firm Including Insolvency of partners, sale to a limited company and piecemeal distribution</p>

**Textbooks & Suggested Readings:**

- Robert N Anthony, David Hawkins, Kenneth A. Merchant, Accounting: Text and Cases. McGraw-Hill Education, 13-th Ed. 2013.
- M.C. Shukla, T.S. Grewal and S.C. Gupta. Advanced Accounts. Vol.-I. S. Chand & Co., New Delhi.
- S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi.
- Deepak Sehgal. Financial Accounting. Vikas Publishing H House, New Delhi.
- Bhushan Kumar Goyal and HN Tiwari, Financial Accounting, International Book House
- Goldwin, Alderman and Sanyal, Financial Accounting, Cengage Learning.
- Tulsian, P.C. Financial Accounting, Pearson Education.
- M. Haniff & A. Mukherjee, Financial Accounting 2nd Edition
- Basu & Das, Financial Accounting, Rabindra Library
- SP Jain & K. L Narang, Financial Accounting, Kalyani Publishers

## INVENTORY MANAGEMENT

Semester  
ICourse Type  
CoreCode  
LEC2004Hours  
60Credits  
4Version  
2020-21**COURSE OBJECTIVES:**

- To understand the concepts of inventory management.

**LEARNING OUTCOMES:**

- The students will be able to:
  - Understand basics of inventory management in warehousing.
  - Compare various inventory management techniques.
  - Explain the requirement for warehouse management systems.
  - Demonstrate the importance of and inventory management.

Unit	Topics
I	<p>Introduction to Inventory Management</p> <p>What is inventory management-Why is inventory management important-Role in inventory management in e-commerce supply chain-Inventory management terms-Types of inventory in e-commerce supply chain -Management of inventory in e-commerce supply chain.</p>
II	<p>Basic Inventory Management Techniques and Relevance to E-Commerce Logistics</p> <p>Economic order quantity-Minimum order quantity -ABC analysis. -Just-in-time inventory management. -Safety stock inventory. -FIFO and LIFO. -Batch tracking. -Consignment Inventory-Perpetual inventory management-Six Sigma and Lean Six Sigma-Demand Forecasting-Cross-docking-Bulk shipments.</p>
III	<p>Key Inventory Management Metrics</p> <p>Inventory turnover -Safety stock -Reorder point -Backorder rate-Carrying cost of inventory</p>
IV	<p>Inventory Management Software</p> <p>What is inventory management software? - Features of good quality software. -Choosing the correct warehousing management system.</p>
V	<p>Latest Trends in Inventory Management</p> <p>Predictive picking using artificial Features of good quality software-Choosing the correct warehousing management system-Omnichannel inventory management solutions-Streamlined management of returned inventory -Streaming Analytics-Advanced sales forecasting-New inventory management skills.</p>

**Textbooks & Suggested Readings:**

1. Course Material Prepared by LSC
2. Sunil Chopra and Peter Meindl, Supply Chain Management Pearson Education Asia, 3rd edition, 2007
3. Operations Research – Concepts, Problems & Solutions- Kapoor V.K.-Sultan Chand & Sons/2017- 978-81-8054-854-3 (TC-532)
4. Vijay Kumar Khurana, 2007, Management of Technology and Innovation, Ane books India, Chennai Further Reading Source
5. Simchi-Levi, David, “Designing and Managing Supply Chain”, Tata McGraw Hill, 3rd Edition, 2007.
6. David E Mulcahy, “Warehouse Distribution and Operations Handbook, McGraw Hill,6thEdition, 1993.

**INTRODUCTION TO E-COMMERCE OPERATIONS**Semester  
ICourse Type  
CoreCode  
LEC2005Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To understand the basics of e-commerce logistics

**LEARNING OUTCOMES:**

The students will learn:

- Basics of e-commerce logistics.
- Types of e-commerce logistics in India.
- Impact of technology on e-commerce logistics.
- Future of e-commerce logistics in India.

Unit	Topics
I	Basics of E-Commerce Logistics What is 'e-commerce logistics'. -Changing dynamics of e-commerce logistics.-Challenges in e-commerce logistics: Regulatory, technical and economic challenges.-Impact and contribution of e-commerce logistics on the world and global trade. -E-commerce logistics management.
II	Types of E-Commerce Logistics in India Roadmap of e-commerce in India. -E-commerce business models-Regulatory policies and impact on e-commerce logistics. -Disruption in e-commerce logistics.
III	Types of E-Commerce Logistics in India Business to Consumer (B2C) - Business model and challenges. -Business to Business (B2B) - Business model and challenges. -Consumer to Consumer (C2C) - Business model and challenges. -Other E-Commerce Models: Govt to Consumer (G2C), Govt to Business (G2B) and Govt to Govt (G2G)-Major Indian players in e-commerce logistics.
IV	Impact of Technology on E-Commerce Logistics Role and advantages of technology in e-commerce logistics. -Technology disruption and innovation in e-commerce logistics- Challenges in adopting technology in Indian e-commerce logistics. -Major upcoming technologies and systems in e-commerce logistics
V	Future of E-Commerce in India Growth projections for e-commerce in India-Upcoming regulations and their likely impact on e-commerce logistics-Global research on e-commerce logistics. Technologies under development for e-commerce logistics: <ul style="list-style-type: none"> <li>GPS tracking.</li> <li>Drone delivery.</li> <li>Electric vehicle delivery systems</li> </ul>

**Textbooks & Suggested Readings:**

- Course Material Prepared by LSC
- E-Commerce an Indian Perspective P.T. Joseph, S. J. - PHI publication
- IT Encyclopedia.Com: Volume 8: Parag Diwan & Sunil Sharma: E-commerce - Pentagon Press.
- E-Commerce Strategies: Charles Trepper – PHI
- S. R. Bhansali, Information Technology Act, 2000, University Book House Pvt. Ltd., Jaipur.
- Essential Cybersecurity Science, Josiah Dykstra, 2017 – O'Reilly

**WORD & PRESENTATION TOOLS - PRACTICAL**Semester  
ICourse Type  
PracticalCode  
LEP2001Hours  
60Credits  
2Version  
2020-21**COURSE OBJECTIVES:**

- To introduce the student to the Word & Presentation tools and its applications and thereby empowering him to utilize e-sources for upgrading their knowledge base.
- To introduce the students with some basic tools and applications which will enable them in e-communicating effectively and analyse data for decision making using data of different kinds

**LEARNING OUTCOMES:**

- Students will be able to apply the Word & Presentation tools in real-life application.
- Enable students to enhance their ability and professional skills in the Computer Application in MS-Word & Presentation

Unit	Topics
I	Windows 2000- working with windows – moving formation within windows arranging Icons Saving Window settings. MS Office Basics – Creating document – entering text-Selecting text giving instructions- Using tool bars- Menu commands- Keyboards shortcuts- Saving files Opening documents – Manipulating Windows – simple Editing- Printing Files
II	Word Basics – Using Auto text – Using Auto Correct Word editing technique finding and replacing text – Checking spelling – using templates- formatting – Formatting with styles creating tables.
III	Power Point basics- Working in outline view- using a design template- Merging presentations in Slider sorter view applying templates – Adding graphs- adding organization Charts.
IV	MS-Word-Practical Type the text, check spelling and grammar bullets and numbering list items, align the text toleft, right justify and centre. -Prepare a job application letter enclosing your Bio-Data-Perform Mail Merger Operation and Preparing labels. -Prepare the document in newspaper column layout.
V	MS POWER POINT-Practical Prepare a PowerPoint presentation with at least three slides for department Inaugural Function-Draw an organization chart with minimum three hierarchical levels-Design an advertisement campaign with minimum three slides-Insert an excel chart into a power point slide.

**Text Books:**

1. Office 2000 Complete Reference by Stepher L. Nelson.
2. PC Software for window made simplex by R.K Taxali – Tata McGraw Hill Publishers Pvt. Ltd.,

**COMMUNICATIVE ENGLISH - PRACTICAL**Semester  
ICourse Type  
PracticalCode  
LEP2002Hours  
60Credits  
2Version  
2020-21**COURSE OBJECTIVES:**

- To develop written and verbal communication skills for effective business communication.
- To identify various communication skills involved in the business organization.
- To develop business communication skills among the students.
- To improve language skills – reading, writing and listening

**LEARNING OUTCOMES:**

- Expose learners to variety of texts to interact with them
- Capability to increase learners to visualize texts and its reading formulas
- Develop critical thinking.
- Develop a more humane and service-oriented approach to all forms of life around them.
- Improvement in their communication skills for larger academic purposes and vocational purposes
- Critical participants in their everyday business life

Unit	Topics
I	Introduction to Business Communication-Characteristics of Effective Organizational Communication Basic Forms of Communication-Process of Communication- Principles of Effective Business Communication-7 C's.
II	Academic Vocabulary and English for Business-Creative Writing Critical Thinking: Introduction to critical thinking – Benefits - Barriers – Reasoning –Arguments - Deductive and inductive arguments – Fallacies - Inferential comprehension Critical thinking in academic writing - Clarity - Accuracy – Precision – Relevance.
III	Business letters – layout of Business letters - types - Business enquiries and replies – offers – quotations – orders – complaints and adjustments – collection letters – circular letters – status enquiries- Email Writing-The Process of Writing E Mails, breaking it Down – The PAIBO Technique, Structuring an E-Mail – The T's – Introduction, Body and Conclusion, Effective Subject lines, Salutation and Signing off- Teleconferencing, video conferencing
IV	Communication in Business Environment: Business Meetings, Notice, Agenda, Minutes - Press Releases - Corporate Communication: Internal and External, Group Discussion, Seminars, Presentations. - Reporting of Proceedings of a meeting. Office Memorandum, Office Orders, Press Release -Listening: Active listening – Barriers to listening – Listening and note taking – Listening to announcements – Listening to news on the radio and television.
V	Reports and Presentations -Business reports and Proposals, Format, visual aids and contents, Oral Business presentations. -Job Application and Resume Writing.

**Textbooks & Suggested Readings:**

1. R.C. Bhatia. Business Communication.
2. R.K. Madhukar. Business Communication.
3. Shraf Ravi. Effective Technical Communication.
4. Marilyn Anderson, Pramod K Nayar and Madhu Chandra Sen. Critical Thinking,
5. Lesikar R.V & Flatley M V, Basic Communication Skills for empowering the internet generation, Tata-McGraw Hill, 2009. 2.
6. Sharma R C & Mohan K, Business Correspondence & Report Writing, TMH, 2009.

**ORGANISATIONAL BEHAVIOUR**Semester  
IICourse Type  
CoreCode  
LEC2006Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- Understand individual behavior in organizations, including diversity, attitudes, job satisfaction, emotions, moods, personality, values, perception, decision making, and motivational theories.
- Understand group behavior in organizations, including communication, leadership, power and politics, conflict, and negotiations.

**LEARNING OUTCOMES:**

- Enable the students how to apply the concepts of planning, organizing, executing/leading and controlling for effective management
- Application of Concepts of organizational behaviour to enhance organizational effectiveness

Unit	Topics
I	Organisational Behaviour – What is O.B., Nature and Structure and Structure of O.S. approaches to O.B. behaviourists framework, social learning framework. Basic understanding of Individual behaviours personality – meaning, development, Freudian stage, Neo Freudian stage.
II	Perception-nature, Importance, meaning, learning & perception. Attitudes & satisfaction: - nature, dimensions of attitudes, meaning of job satisfaction. Sources & consequences of job satisfaction. Job stress – meaning, causes & effects. Group dynamics: - Nature of Groups, types- committee organization its nature & functions. Informal Organization structure, Informal communication system.
III	Conflicts – Organizational conflicts, types of conflict, Strategies of interpersonal conflicts. Group decision making & control: - Nature and meaning of decision making, phases of decision-making process, Meaning of Control, elements of control process.
IV	Organization Change and Development: Definition and Meaning, need for Change, Strategies to Overcome Resistance, Process of Change, Meaning and Definition of OD, OD Interventions.
V	Leaderships- types—theories of leadership (Trait theory, Michigan studies and Fiedler's contingency model) modern approach to leadership theories—leadership styles.

**Textbooks & Suggested Readings:**

1. Business Organization and Management by Bhushan Y.K.
2. Business Organization by Gupta C.B
3. Organizational Behaviour by L.M. Prasa



## ENVIRONMENTAL STUDIES

Semester  
IICourse Type  
CoreCode  
LEC2007Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- It is concerned with the exploration, investigation and development of an understanding of the natural, human and social dimensions of local and wider environments.
- It provides opportunities to engage in active learning, to use a wide range of skills, and to acquire open, critical and responsible attitudes

**LEARNING OUTCOMES:**

- Master core concepts and methods from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- Understand the transnational character of environmental problems and ways of addressing them, including interactions across local to global scales.

Unit	Topics
I	Ecology Ecosystem – Introduction- Abiotic and Biotic components. Structure and functions of Ecosystem – Food Chain, Food web, Ecological pyramids, Energy flow and biogeochemical cycles. Biodiversity – Values, Type and levels of Biodiversity. Causes of depletion. Conservation of biodiversity
II	Pollution Water Pollution – Sources of water, water quality standards, type of pollutants – its sources and effects. Air Pollution – composition of atmosphere, Air quality standards, Sources and adverse effects of air pollution, Greenhouse effect, global warming, acid rain, ozone depletion, Noise Pollution – Introduction, Level of noise, Sources and adverse effects of noise, Control of noise pollution.
III	Solid Waste Management Municipal waste – Introduction, classification of solid waste, composition and characteristics of solid waste, collection conveyance and disposal of solid waste, recovery of resources. Sanitary land filling, Vermi composting, incineration. Biomedical waste – Generation, collection and disposal.
IV	Non-Conventional energy sources Introduction, renewable sources of energy: solar energy, wind energy, Energy from ocean, energy from biomass, geothermal energy and nuclear energy. Potential of renewable energy resources in India.
V	Social Issues and EIA Sustainable Development-Rainwater harvesting. Public awareness and environmental education. Environmental Legislations in India – Environmental Protection act-1986, Air (Prevention and control of Pollution) act, water (Prevention and control of Pollution) act, wildlife protection act, Forest conservation act.

**Textbooks & Suggested Readings:**

1. Agarwal Shikha, Suresh Sahu, Environmental Engineering and Disaster Management, Dhanpat Rai & Co., 2010
2. Brunner R.C., Hazardous Waste Incineration, McGraw Hill Inc. 1989. Textbooks & Suggested Readings:
3. Clark R.S., Marine Pollution, Clarendon Press Oxford (TB)
4. Cunningham, W.P, Cooper, T.H. Gorhani, E & Hepworth, M.T., Environmental Encyclopaedia, Jaico Publishing House, Mumbai, 2001.

## QUANTITATIVE TECHNIQUES

Semester  
IICourse Type  
CoreCode  
LEC2008Hours  
60Credits  
4Version  
2020-21**COURSE OBJECTIVES:**

- To familiarize the student with the use of quantitative techniques in managerial decision making.

**LEARNING OUTCOMES:**

- Understand various quantitative & statistical methods
- Understand data and draw inference from data
- Calculate and interpret statistical values by using statistical tool (correlation & regression)
- Demonstrate an ability to apply various statistical tool to solve business problem

Unit	Topics
I	Quantitative techniques—introduction—meaning and definition—classification of QT, QT and other disciplines—application of QT in business—limitations.
II	Statistical inference—testing of hypothesis—procedure—error in testing—two tail test and one tail test—nonparametric tests—Chi-Square test, Wilcoxon test. Parametric tests—Z test—test of significance of large samples—test for two sample means—small sample mean tests—Student t test—Analysis of variance—F test—one-way ANOVA and two-way ANOVA tests
III	Analysis of Time Series - Components of a time series, Adjustment in time series, Measurement of trend by moving average and least squares methods (linear and quadratic trends), Measurement of seasonal variation by simple average method, Forecasting, De-seasonalisation.
IV	Transportation and Assignment Problems Nature and scope of transportation and allocation Analytical models, different methods for finding initial solution - N-W Corner Rule, Least Cost Method and VAM. Unbalanced TP, Test for optimality – MODI method, AP a variant of Transportation model, Hungarian method, Restricted Assignment problems. Queuing Theory – Models – Simple Problem – Introduction to simulation
V	Statistical Quality Control: Introduction; Sources of Variations; Statistical Process Control Methods; Control Charts; Acceptance Sampling; Advantages of Statistical Quality Control.

**Textbooks & Suggested Readings:**

- David M. Levine: Business statistics
- S.P. Gupta; Statistical methods

## WAREHOUSE MANAGEMENT

Semester  
IICourse Type  
CoreCode  
LEC2009Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become Warehouse professionals
- To orient students in the field of Logistics
- To help Students to understand Warehousing and distribution centre operations

**LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of Warehousing and distribution centre operations in the real-life situation
- This subject will enable them to enhance their ability and professional skills.

Unit	Topics
I	Introduction to Warehouse (Storage and Packaging) Background – Need for Warehouse – Importance of warehouse - Types of Warehouses - Broad functions in a warehouse - warehouse layouts and layout related to functions. Associate warehouse -Its functions - equipment available in associate ware house - Video on warehouse – Visits to ware houses - Warehouse Organization Structure - Benefits of Warehousing.
II	Receiving and Dispatch of Goods in warehouse Various stages involved in receiving goods – Stages involved receipt of goods- Advanced shipment notice (ASN) or invoice items list- Procedure for Arranging of goods on dock for counting and Visual inspection of goods unloaded- Formats for recording of goods unloaded from carriers- Generation of goods receipt note using computer- Put away of Goods- Put away list and its need-Put away of goods into storage locations - storage location codes and its application- Process of put away activity- Procedure to Prepare Warehouse dispatches
III	Warehouse Activities Explain receiving, sorting, loading, unloading, Picking Packing and dispatch, activities and their importance in a warehouse - quality parameters - Quality check-need for quality check-importance of quality check. Procedure to develop Packing list / Dispatch note-Cross docking method - Situations suited for application of cross docking -Information required for coordinating cross docking- Importance of proper packing-Packing materials -Packing machines -Reading labels
IV	Warehouse Management: Warehouse Utilization Management - Study on emerging trends in warehousing sector - DG handling -use of Material Handling Equipment's in a warehouse - Inventory Management of a warehouse - Inbound & Outbound operations of a warehouse and handling of Inbound & Outbound operations. Distribution – Definition – Need for physical distribution – functions of distribution – marketing forces affecting distribution. The distribution concept – system perspective. Channels of distribution: role of marketing channels – channel functions – channel structure –designing distribution channel – choice of distribution channels
V	Warehouse Safety Rules and Procedures: The safety rules and' Procedures to be observed in a Warehouse - Hazardous cargo – Procedure for Identification of Hazardous Cargo - safety data sheet- Instructions to handle hazardous cargo - Familiarization with the industry. Health, Safety & Environment - safety Equipment's and their uses - 5S Concept on shop floor. Personal protective Equipment's (PPE) and their uses.

**Text & Reference Books:**

1. Course Material Prepared by LSC
2. J P Saxena, Warehouse Management and Inventory Control- Vikas Publication House Pvt Ltd, First Edition, 2003.
3. Warehouse Management: Automation and Organisation of Warehouse and Order Picking Systems [With CDROM], Michael Ten Hompel, Thorsten Schmidt, Springer-verlag, First Edition, 2006.
4. Management Guide to Efficient Money Saving Warehousing, Stephen Frey, Gower, 1982.
5. Kapoor Satish K., and Kansal Purva, 'Basics of Distribution Management: A Logistical Approach', Prentice HALL of India.

## MATERIAL HANDLING

Semester  
IICourse Type  
CoreCode  
LEC2010Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become effective professionals
- To orient students on recent changes and development in the field of material management
- To help Students to understand basic Principles and concept of material Management

**LEARNING OUTCOMES:**

- Students will be able to apply the knowledge about material management in the real-life business situation
- This subject will enable them to enhance their managerial ability and professional skills

Unit	Topics
I	<p>Introduction:</p> <p>Introduction: Materials Management - Evolution, Importance, Scope and Objectives- Interface with other functions. Concept of Logistics and Supply Chain Management and evolution to 4PL-Supply Chain Management - Objectives, Components, Significance, Trade off Customer Service &amp; Cost.</p>
II	<p>Types of Material Handling Equipment</p> <p>Storage and Handling Equipment: -Racks, Bins and Drawers., Stacking Frames, Shelves, Mezzanines. Transport Equipment: Conveyors, Cranes, Lifts and elevators. Engineered Systems: Automated Guided Vehicles (AGVs), Automated Storage and Retrieval Systems (AS/RS), Conveyor Systems, Robotic Delivery System. Bulk Material Handling Equipment, Stackers and Reclaimers., Hoppers and Silos.</p>
III	<p>Material Requirement Planning (MRP)</p> <p>Material Requirement Planning (MRP) - Advantages over conventional planning (Order Point Method) – Input and output of MRP system - Forecasting - Overview of quantitative and qualitative methods of forecasting - Master Production Schedule - Bill of Materials - BOM Explosion - Material flow in MRP. MRP II. Concept of ERP. (Numerical likely on BOM Explosion, estimating Net requirements).</p> <p>Design of Material Handling Systems</p> <p>The Unit Load Concept-In-Process Handling-Distribution.</p>
IV	<p>Quality control of material</p> <p>Quality control of material: Incoming material quality control- statistical quality control- governmental purchasing practices and procedures-Inventory control &amp; Cost Reduction techniques: Inventory turns ratios-Standardization – need and importance. Codification – concept, benefits. Value Engineering and Value Analysis – concept and process.</p>
V	<p>Health and Safety</p> <p>Materials handling and storage systems, Physical distribution logistics- transportation, Traffic and claims management- operations research and related techniques- Principles of Materials Handling system - Materials Handling Equipment – Safety issues.</p>

**Text & Reference Books:**

1. Course Material Prepared by LSC
2. Materials management: procedures, text and cases - A.K. Datta
3. Materials management: An integrated approach - P. Gopalakrishnan
4. Introduction to Materials management - J.R. Tony Arnold & Stephen N. Chapman
5. Materials & Logistics Management - L.C. Jhamb

## FIRST MILE OPERATIONS



**COURSE OBJECTIVES:**

- To understand the First Mile operational processes in e-commerce logistics.

**LEARNING OUTCOMES:**

THE STUDENTS WILL LEARN:

- Basics of First Mile operations.
- Shipment pickup operations.
- Different types of shipment processing operations at Processing Centers.
- Layout of a Processing Centre.
- Key challenges in First Mile operations and First Mile metrics.

Unit	Topics
I	Role of First Mile in E-Commerce Logistics Difference between First Mile, Line Haul and Last Mile operations. -First Mile Operations - Overview. -Why is First Mile operations important in e-commerce logistics-First Mile process flow.
II	Shipment Pickup Operations Shipment pickup process. -Pickup operations staff - roles and responsibilities. -Pickup coordination. -Safety and security of shipments during pickup-Pickup documentation.
III	Shipment Processing Operations Primary and secondary processing. -Bagging operations. -Manual processing operations-Automated processing operations
IV	Layout of A Processing Centre Inbound operations-Processing Operations-Outbound Operations-Safety and security-Processing Centre staff - roles and responsibilities
V	First Mile Analytics and Metrics Productivity-Pickup operations metrics-Processing operations metrics-First Mile dashboard. Tools and Applications Pickup tools and applications-Processing tools and applications-Exceptions in First Mile and impact on operations-Tools and communication to resolve exceptions.

**Text & Reference Books:**

1. Course Material Prepared by LSC

**DATA ANALYSIS USING SPREADSHEET - PRACTICAL**Semester  
IICourse Type  
PracticalCode  
LEP2003Hours  
60Credits  
2Version  
2020-21**COURSE OBJECTIVES:**

This course is designed with the view of making the student skilful at

- Performing data analysis using spreadsheet (MS Excel)
- Creating pivot tables from a range with rows and columns in Excel

**LEARNING OUTCOMES:**

- Support the E communication effectively with help of Spread Sheet
- Summarize data with data analysis, PivotTables, and Pivot Charts.
- Work with charts and the drawing tools.
- Import and export data from other applications

Unit	Topics
I	Introduction to Excel, About Excel & Microsoft, Uses of Excel, Excel software, Spreadsheet windowpane, Title Bar, Menu Bar, Standard Toolbar, Formatting Toolbar, the Ribbon, File Tab and Backstage View, Formula Bar, Workbook Window, Status Bar, Task Pane, Workbook & sheets Columns & Rows
II	Selecting Columns & Rows, Changing Column Width & Row Height, Auto fitting Columns & Rows, Hiding /Unhiding Columns & Rows, Inserting & Deleting Columns & Rows, Cell, Address of a cell, Components of a cell – Format, value, formula, Use of paste and paste special Functionality Using Ranges. Using Ranges, Selecting Ranges, Entering Information into a Range, Using AutoFill
III	Creating Formulas, Using Formulas, Formula Functions – Sum, Average, if, Count, max, min, Proper, Upper, Lower, Using AutoSum, Advance Formulas Concatenate, Lookup, Lookup, Match, Count if, Text, moving between Spreadsheets, Selecting Multiple Spreadsheets, Inserting and Deleting Spreadsheets Renaming Spreadsheets, Splitting the Screen, Freezing Panes, Copying and Pasting Data between Spreadsheets, Hiding, Protecting worksheets
IV	Creating Charts, Different types of chart, Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table Data Analysis Sorting, Filter, Text to Column, Data Validation
V	PivotTables, Creating PivotTables, manipulating a PivotTable, Using the PivotTable Toolbar, Changing Data Field, Properties, displaying a PivotChart, Setting PivotTable Options, Adding Subtotals to PivotTables Spreadsheet Tools, Making Macros, Recording Macros, Running Macros, Deleting Macros

**Textbooks:**

Microsoft Excel 2016: Comprehensive, Freund, Starks, and Schmieder, Cengage Learning, 2017, ISBN: 9781305870727.

## COST ACCOUNTING

Semester  
IIICourse Type  
CoreCode  
LEC2012Hours  
60Credits  
4Version  
2020-21**COURSE OBJECTIVES:**

- To make students understand the various costing techniques applied in different industries to ascertain the cost of products and services

**LEARNING OUTCOMES:**

- Student will be able to apply costing techniques in different types of industries.
- Student will be able to apply costing techniques in business decisions.
- Understand and use the basic concepts of costing and costing systems in their professional life.
- Integrate cost accounting with financial accounting for management decision making.

Unit	Topics
I	Introduction to Costing Methods: Meaning, Importance and Categories, Cost accounting Standards- Generally Accepted Cost Accounting Principles (GACAP)- Purpose, Objective and Applicability.
II	Contract costing: Introduction- Contract account, Profit on incomplete contracts, work in progress, Contractee's Accounts, Escalation clause. Process costing: Introduction, Distinction between Job costing, and process costing, process losses, inter-process profits, Joint products and by-products- Meaning, features, differences, problems on process accounts including joint and by products.
III	Standard Costing and Variance Analysis: Meaning of Standard Cost- Relevance of Standard Cost for Variance Analysis – Significance of Variance Analysis – Computation of Standard Costs for Materials, Labour and Overhead Variances- Comparison between Budgeting and Standard Costing – Variance reporting- Responsibility Accounting – Meaning and Objects – types of Responsibility Centers- Management Reporting.
IV	Activity based costing (ABC); Definition, Features, Advantages, Differences between ABC and traditional costing, Allocation of overheads; Objectives of ABC, Development of ABC, Implementation of ABC, Problems on Computation of Activity Based Costing and Traditional Costing
V	Marginal Costing and Cost-Volume-Profit (CVP) analysis: meaning, concept - assumptions and practical applications of Break-even analysis – decisions regarding sales mix - make or buy - limiting factor - export decision - plant merger - shut down of a product line- Du Pont Analysis.

**Text & Reference Books:**

1. Cost Accounting: N.K. Prasad
2. Practical Costing: Khanna, Pandey & Ahuja
3. Cost Accounting: M.L. Agarwal
4. Cost Accounting: Jain & Narang

## MARKETING MANAGEMENT

Semester  
IIICourse Type  
CoreCode  
LEC2013Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To emphasize the importance of the marketing function in an organization.
- To understand the core concepts right from deciding the segment till customer satisfaction
- To impart knowledge with respect to latest trends in Marketing, Marketing Mix, Social responsibility, and ethical issues in Marketing Global Marketing approach.

**LEARNING OUTCOMES:**

- Discuss the importance of macro and microenvironment in the company's marketing function.
- Differentiate the consumer and institutional buyer behaviour.
- Define the target segments for the product
- Justify the importance of products, branding, and new product development.
- Understand the importance of Channel of distribution.

Unit	Topics
I	Marketing Meaning and concepts of Marketing, Sales Concept, Marketing concept, Social Marketing concepts, Societal Marketing concept, Marketing Mix, 4 Ps of Marketing, Marketing Environment in India.
II	Consumer Behaviour & Market Segmentation 1. Consumer Behaviour – Factors influencing buying behaviour – consumer buying decision process – Buying motives - influences. 2. Market segmentation – criteria - Bases of segmentation – benefits. Marketing research process: Defining research problem, research objective research techniques
III	Product Planning & Development and Pricing 1. Product Planning & Development -Definition, Classification of Product, Stages of Product Life Cycle (PLC) and Factors affecting PLC.-Product Planning – Genesis and Importance of Product Planning in Marketing. -Product Development: Meaning, Principle of Product Development, Stages of New Product Development and Factors affecting development of New Products. 2. Pricing- Meaning, Objectives, Price Policies and Strategies and Methods of fixing prices.
IV	Distribution Channel and Promotion 1. Distribution Channel- meaning, Types of Distribution channel- Direct & Indirect. Role of intermediaries and distribution channel management. Channel Management Decisions, Returns Management and Reverse Logistics. 2. Promotion – elements of promotion mix- Advertising, sales promotion, personal selling and sales management. Public and customer relations, direct and online marketing, multilevel marketing-the new marketing model.
V	Promotion & Marketing and Society 1. An overview. Advertising, sales promotion, personal selling and sales management. Public and customer relations, direct and online marketing, multilevel marketing-the new marketing model. 2. Marketing and Society-Social responsibility and ethical issues in marketing. Global marketing program. The old and new economies. Demand side marketing. Legal issues in marketing. marketing skills, Brand marketing skills, CRM. Marketing in Indian Context. Marketing in 21st Century

**Textbooks & Suggested Readings**

1. N. Rajan Nair, Marketing Management, Sultan Chand & Sons.
2. Ramasamy V.S. and Namakumary S, Handbook of Marketing Management, Macmillan.
3. Rajagopal, Marketing Management, Vikas Publishing House Pvt. Ltd.,
4. S. Jayachandran, Marketing Management, Excel Books.
5. Rajan Saxena, Marketing Management, TMH.



## MIS FOR E COMMERCE

Semester  
IIICourse Type  
CoreCode  
LEC2014Hours  
60Credits  
4Version  
2020-21**COURSE OBJECTIVES:**

- To understand the concepts of Managing information systems

**LEARNING OUTCOMES:**

The students will be able to:

- Understand the basics of management information systems
- Understand various global E-business processes.
- Explain the concept of electronic commerce.
- Explain the relationship between decision making and Information systems.

Unit	Topics
I	Management Information Systems 1.1 Information Systems 1.2 History of MIS 1.3 Changing Business Environment 1.4 Management Information System and Its Tasks 1.5 Information and Knowledge-Economy 1.6 Contemporary Approach to Information Systems
II	Global E-business and Collaboration 2.1 Business Processes and Information Systems 2.2 Types of Information Systems 2.3 Systems for Collaboration and Social Business 2.4 The Information Systems Function in Business
III	Electronic Commerce and the Digital Organization 3.1 Electronic Commerce 3.2 Digital Organization 3.3 Electronic Data Interchange (EDI) 3.4 Role of Intranets
IV	Enhancing Decision Making 4.1 Decision Making and Information Systems 4.2 Business Intelligence in the Enterprise 4.3 Business Intelligence Constituencies 4.4 Building Information Systems 4.5 Managing Projects 4.6 Managing Global Systems
V	Redesigning the Organization with Information Systems 5.1 Systems as Planned Organizational Change 5.2 Business Process 5.3 Process Improvement 5.4 System Analysis 5.5 Systems Design

**Text & Reference Books:**

1. Course Material Prepared by LSC

## E COMMERCE LOGISTICS OPERATIONS

Semester  
III

Course Type  
Core

Code  
LEC2015

Hours  
60

Credits  
4

Version  
2020-21

### COURSE OBJECTIVES:

- To understand the logistics operations in E-Commerce

### COURSE OUTCOME:

The students will be able to:

1. Understand the basics concept of logistics in E-Commerce
2. Understand the process of capacity management.
3. Explain the strategies used in logistics planning & execution
4. Explain the Systems used in E-Commerce logistics and how logistics and operations are interlinked.

Unit	Topics
I	Logistics and System Concept, Objectives and Role of Logistics 1.1 Introduction 1.2 Logistics Functions and Management 1.3 Role of Logistics in the Supply Chain 1.4 Catalysts for Outsourcing Trends 1.5 Benefits of Logistics Outsourcing 1.6 Third- and Fourth-Party Logistics 1.7 Career & Growth in Logistics and Supply Chain
II	Capacity management in logistics 2.1 Logistics goals and types 2.2 General capacity theory in logistics 2.3 Inbound and outbound operations 2.4 Terms and definitions in inbound and outbound logistics 2.5 Capacity management in inbound and outbound logistics 2.6 Capacity planning and management of Reverse logistics
III	STRATEGIC LEVEL LOGISTICS 3.1 Strategic and Joint Interfaces 3.2 10 Logistics Requirements 3.3 Logistics Related Unified Action Partners 3.4 Joint Interdependence between facilities and departments 3.5 Multinational Logistics Operations 3.6 Logistics Support to Power Projection
IV	Systems used in Ecommerce Logistics 4.1 Integration with stock & order processing systems, 4.2 Systems used in Inbound and outbound operations 4.3 Returns processing systems 4.3 Systems used for Value-added delivery options (premium / express / scheduled / location mapping) 4.5 Customer and Support Relationships
V	INTEGRATING LOGISTICS INTO OPERATIONS 5.1 Integrating Logistics into the Operations Process 5.2 Assessment for Logistics Operations 5.3 Planning Logistics Operations 5.4 Preparing for Logistics Operations 5.5 Executing Logistics Operations 5.6 Terminating partner Operationsa

### Text & Reference Books:

1. Course Material Prepared by LSC

**TRANSPORTATION FOR E COMMERCE**Semester  
IIICourse Type  
CoreCode  
LEC2016Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To understand the role of transportation in E-Commerce

**COURSE OUTCOME:**

- The students will be able to:
  - Understand the basics concept of transportation in E-Commerce
  - Understand the strategies used in planning transportation.
  - Explain the systems used in transportation management
  - Understand the socio-economic factors that affect transportation

Unit	Topics
I	Introduction – 5 Hrs 1.1 What is Transportation Supply Chain? 1.2 Importance and functions of Transportation 1.3 Types of transportation, Transportation in India 1.4 Factors influencing transportation decision, Trade Compliance for suppliers. 1.5 Role of Transportation in Supply Chain 1.6 Inbound, Outbound and shipment preparation in transportation
II	Transportation Management – 10Hrs 2.1 What is Transportation Management 2.2 Techniques used in managing transportation, Transport Modalities 2.3 Types of & Strategies in Transport management (supplier relationship management, Market intelligence and research on suppliers, carrier selection and review, network optimization and review process. 2.4 Benefits and Risks analysis of various types of Transportation. 2.5 Equipment's used in transportation
III	Transportation Management System – 20 Hrs 3.1 What is Transportation Management System? 3.2 Why It's Important to Have a Transportation Management System and its benefits to shippers. 3.3 Quality management systems used in Transportation. 3.4 Systems used in Transportation management: <ul style="list-style-type: none"> <li>Master Data Management, Complete Transportation Order, Document Verification, Order and Capacity Planning, Order Consolidation, Carrier Selection, Non-Standard Order Management, Supply Chain Visibility, Proactive Shipment Monitoring,</li> <li>Customer Service, FPA, Tendering Process Standardization</li> <li>Reporting, Performance Reviews, Sustainability</li> <li>Managed Transportation Services , EDI and Interfacing</li> <li>TMS and MTS Providers</li> </ul>
IV	Socio Economic trends effecting Transportation – 5 hrs 4.1 Technology & Regulations Impact on the transport Industry 4.2 Trade Barriers and International diplomacy for global transportation 4.3 Increasing supply chain complexity due to demographics 4.4 Omni channel business models (Full truck load, Less than truck load)
V	Future of transportation 5.1 Future and Growth of Transportation Market by 2020 5.2 Developing competitive advantage 5.3 Upcoming tools and techniques in transportation

**Text & Reference Books:**

- Course Material Prepared by LSC

## REVERSE LOGISTICS FOR E COMMERCE

Semester  
III

Course Type  
Core

Code  
LEC2017

Hours  
45

Credits  
3

Version  
2020-21

**COURSE OBJECTIVES:**

- To understand the role of Reverse Logistics in E-Commerce

**COURSE OUTCOME:**

The students will be able to:

- Understand the basics concepts of reverse logistics in E-Commerce
- Understand the process involved in reverse logistics.
- Explain the prospects and systems used in reverse logistics
- Understand value creation using reverse logistics.

Unit	Topics
I	Introduction 1.1 What is Reverse Logistics & its importance in Ecommerce? 1.2 Reverse Logistics challenges for ecommerce 1.3 Trends in Reverse Logistics 1.4 Implementing the right reverse logistics strategy? 1.5 Types of returns in reverse logistics
II	Reverse Processes 2.1 Forward vs. Reverse Logistic 2.2 Stages in Reverse logistics: Gatekeeping, Collection, Sorting stage, Processing stage. 2.3 Challenges and barriers in Reverse Process 2.4 Tools and applications in Reverse logistic operations
III	Prospects of Reverse Logistics 3.1 Shipping or redistribution system 3.2 Information system 3.3 Performance management 3.4 Innovations in Reverse Logistics 3.5 Reverse Logistic Market Prospects
IV	Creating value through reverse logistics 4.1 Network design and management integrating reverse logistics, General strategic decisions, target markets, networks, products, Processes 4.2 Strategic, tactical, and operational decisions specific to Reverse logistics 4.3 Monitoring and controlling the value of reverse logistics 4.4 Maintaining partnerships using reverse logistics..
V	Technology and Reverse Logistics 5.1 New Technology Trends in Reverse Logistics 5.2 Digital Transformation in Reverse Logistics 5.3 AI for Reverse Logistics

**Text & Reference Books:**

1. Course Material Prepared by LSC

## LAST MILE OPERATIONS

Semester  
III

Course Type  
Core

Code  
LEC2018

Hours  
45

Credits  
3

Version  
2020-21

### COURSE OBJECTIVES:

- To understand Last Mile Operations in E-Commerce

### COURSE OUTCOME:

The students will be able to:

- Understand the basics concept of Last mile logistics in E-Commerce
- Understand the processes involved in Last mile logistics
- Understand various metrics and customer services processes to be followed in last mile logistics
- Explain the prospects of last mile logistics.

Unit	Topics
I	Introduction 1.1 What is Last Mile in Ecommerce? 1.2 Importance of Last Mile in the supply chain 1.3 Last Mile Delivery challenges for ecommerce 1.4 Trends in Last Mile delivery 1.5 Route optimization in Last Mile operations
II	Last Mile Processes 2.1 Delivery Process & its challenges 2.2 Reverse pickup process in Last mile operations 2.3 Challenges in Reverse Pickup process 2.4 Tools and applications in Last Mile operations 2.5 Considerations for effective last mile logistics strategy
III	Metrics 3.1 Metrics to measure in last file 3.2 Automation and technology driving metrics.
IV	Customer service 4.1 Customer service and its importance 4.2 Good and bad customer service (Dos and Don'ts of customer service) 4.3 Relationship between metrics and customer service.
V	Prospects of Last Mile Logistics- 5Hrs 5.1 Innovations in Last Mile Logistics 5.2 Technology Trends in Last Mile Delivery 5.3 Last Mile Delivery Market Future Prospects

### Text & Reference Books:

- Course Material Prepared by LSC

**MANAGEMENT ACCOUNTING**Semester  
IVCourse Type  
CoreCode  
LEC2019Hours  
60Credits  
4Version  
2020-21**COURSE OBJECTIVES:**

- To enable the students to understand the concept and relevance of management Accounting
- To provide the students an understanding about the use of accounting and costing data for planning, control and decision taking
- To make students understand the various costing techniques applied in different industries to ascertain the cost of products and services

**LEARNING OUTCOMES:**

- The student will be able to understand the importance of management accounting as a key input for managerial/ financial decision making. The students will be able to take financial decisions using tools of management accounting.
- Students will be able to apply the Basic knowledge of Management and cost accounting in the real-life situation
- This subject will enable them to enhance their ability and professional skills

Unit	Topics
I	Management Accounting –Nature and Scope – Difference between Cost Accounting, Financial Accounting and Management accounting – Recent Trends in Management Reporting.
II	Analysis and Interpretation of financial Statement: - Meaning- Types and Methods of Financial Analysis – Comparative statements – Trend Analysis – Common size statements (a general discussion only). Ratio Analysis: - Meaning –Nature – uses and limitations of Ratios –liquidity, profitability, Turnover, Solvency, Leverage, Market test ratios – Constructions of Financial Statements from ratios –Judgment of financial stability through ratios
III	a. Fund Flow Statements: Meaning and concept of fund – Current and Non- Current Accounts – Flow of Fund –Preparation of Fund flow statements – uses and significance b. Cash Flow Statement: Difference between fund flow statement and cash flow statements – Preparation of cash flow statements as per AS-3 Norms – Direct and Indirect methods.
IV	Budget and Budgetary Control: Meaning, - establishing a system of Budgetary Control – Preparation of Sales - Production - Cash Budget - Fixed and Flexible budgets, Master budget - Zero based budgeting (ZBB)-Performance budgeting
V	Cost flow statement: Meaning, Definition, Uses and Limitations-Differences between funds flow statement and cash flow statement-Preparation of Cash flow statement (AS-7): Direct method and Indirect Method.

**Text & Reference Books:**

1. Dr. S.N. Maheswari: Management Accounting
2. Made Gowda: Management Accounting
3. Dr. S.N. Goyal and Manmohan: Management Accounting
4. B.S. Raman: Management Accounting
5. R.S.N. Pillai and Bagavathi: Management Accounting
6. Foster: Financial Statement Analysis, Pearson Education.
7. PN Reddy & Appanaiah: Essentials of Management Accounting.

## HUMAN RESOURCES MANAGEMENT

Semester  
IVCourse Type  
CoreCode  
LEC2020Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become Human resource management professionals
- To help Students to understand Human resource management

**LEARNING OUTCOMES:**

- Understand the financial impact of HRM activities on organizations.
- Understand the implications of increasing diversity and globalization for HRM processes.
- Students will be able to apply the Basic knowledge of Human resource management in the real-life situation
- This subject will enable them to enhance their ability and professional skills

Unit	Topics
I	Introduction to HRM - Functions of HR Management - Qualities of HR Manager-Role of HR Executives International Human Resource Management - Concepts of IHRM Approaches to IHRM-Features of IHRM - Importance of IHRM - Factors affecting IHRM
II	Human Resource Planning - Objectives of HR Planning-HR Planning at different Planning Levels- Conceptual Process of HR Planning Job Analysis and Design: Job Analysis Information - Uses of Job Analysis - Process of Job Analysis-Methods of collecting Job Analysis Data-Job Description. Recruitment and Selection-Recruitment Policy-Objectives of Recruitment- Selection Procedure-Essentials of Selection Procedure-Steps in Selection Procedure.
III	Promotion, Transfer, Job Rotation & Career Planning, Career Development-Need for Career Planning-Career Development-Suggestions for Effective Career Development.  Performance Appraisal- Evaluation Process-Performance Appraisal Methods-Management by Objectives- Behaviorally Anchored Rating Scale-Pitfalls in Performance Appraisal-Use of Performance Appraisal.
IV	Employee Training and Development -Steps in Training Programmes - Training Evaluation- Areas of Training-Importance of Learning-Employee Training Methods-Evaluating Management Development Program Compensation Management-Process of Job Evaluation-Techniques of Job Evaluation- Advantages of Job Evaluation-Types of Incentive Plans-Employee Benefits-Objectives of Employee Benefits.
V	Occupational Safety and Health -Causes of Safety and Health problems at the workplace- Provisions to prevent Accidents in the workplace-Stress and Consequences on Employee Performance. Grievance Handling-Concept of Grievance-Causes of Grievance-Effective Grievance Redressal – Steps in Grievance Redressal Procedures. Discipline Action-Aims and Objectives of Discipline-Forms and Types of Discipline-Principles of Maintaining Discipline-Disciplinary Procedure-Types of Disciplinary Actions-Dismissal.

**Textbooks & Suggested Readings:**

1. VSP Rao, Human Resource Management: Text and cases, First edition, Excel Books, New Delhi - 2000.
2. Dr. R. Venkatapathy & Assissi Menacheri, Industrial Relations & Labour Welfare, Adithya Publications, CBE, 2001.
3. Robert L. Gibson and Marianne H. Mitchell, Introduction to Counseling and Guidance, VI edition, PHI,

## HUB & LINE OPERATIONS

Semester  
IVCourse Type  
CoreCode  
LEC2021Hours  
60Credits  
4Version  
2020-21**COURSE OBJECTIVES:**

- To understand the concepts of Hub & Line Operations

**COURSE OUTCOME:**

- Understand the basics of Hub and line operations in Ecommerce
- Understand inbound and outbound logistics
- Explain in detail all the machines and equipment used in hub operations.
- Explain the prospects of line haul logistics

Unit	Topics
I	Introduction 1.1 What is Hub and line Logistics in Ecommerce? 1.2 Importance of line haul Logistics in Ecommerce 1.3 Line haul challenges for ecommerce 1.4 Trends in Line haul Logistics 1.5 How to optimize a Line Haul or Line Haul Network? 1.6 What are the results of optimizing a Line Haul or Line Haul Network?
II	Inbound Logistics 2.1 What is Inbound Logistics? 2.2 Objectives of Inbound Logistics 2.3 Steps in Inbound Process 2.4 Role of Inbound Supply chain Management in ecommerce logistics
III	Outbound Logistics 3.1 What is Outbound Logistics? 3.2 Objectives of Outbound Logistics 3.3 Steps in Outbound process 3.4 What are the Differences Between Inbound and Outbound Logistics? 3.5 Tools Utilized by Both Inbound and Outbound Logistics
IV	Machines & Equipment 4.1 Introduction to the machines & equipment used 4.2 Types of sorters 4.3 Types of equipment to handle 4.4 Equipment and machine handling Compliances
V	Prospects of Line haul Logistics 4.1 Innovations in Line Haul Logistics 4.2 New Technology Trends in Line Haul Logistics 4.3 Future Automated Line Haul Processes 4.4 Line Haul Market Prospects

**Text & Reference Books:**

1. Course Material Prepared by LSC



**E COMMERCE CUSTOMER SERVICE**Semester  
IVCourse Type  
CoreCode  
LEC2022Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To understand the concept of customer service in E-Commerce

**COURSE OUTCOME:**

The students will be able to:

- Understand how to create customer centric organization
- Understand how to communicate effectively with customers
- Explain the strategies used in servicing customers
- Understand customer encounters and tools used in customer service.

Unit	Topics
I	Creating the Customer-Centric Organization- 1.1 Championing Customer Service 1.2 In-Focused or Customer-Focused: Where Do You Stand? 1.3 Building a Winning Service Strategy 1.4 Better Service through Surveys: Questionnaires, Focus Groups, and Interviews
II	Communicating Effectively with Customers 2.1 Developing Active Listening Skills 2.2 Speaking in the Positive: Words and Tone of Voice 2.3 Body Language: Yours and Theirs 2.4 Sending a Message Through Physical Surroundings 2.5 Improving Verbal communication 2.6 Understanding Your Customer's Communication Style
III	Customer Service Strategies- 3.1 Anticipating Needs - The Key to Your Customer's Heart 3.2 Ten Principles to Keep Your Clients Happy and Loyal! 3.3 Exceeding Your Clients' Expectations 3.4 The Value of Customer Service Training for Your Staff 3.5 7 Ways to Make Your Customers Feel Important 3.6 Recovering from Customer Service Blunders 3.7 Five Customer Service Commandments 3.8 When It is Time to Fire a Customer
IV	Managing the Customer Encounter 4.1 Showing Customers That You Value Their Business 4.2 Understanding Customer Behaviour and Creating Positive Outcomes 4.3 Asking the Right Questions 4.4 Dealing Effectively with Customer Hand-Offs 4.5 Making the Customer's Problem Your Problem 4.6 Telling the Customer "No" 4.7 Closing the Customer Encounter 4.8 Following Through with the Customer Unit 5 Customer Service Tools -5 hours 5.1 The Client Needs Analysis (CNA) 5.2 The Customer Service Survey & Analysis
V	Customer Service Tools -5 hours 5.1 The Client Needs Analysis (CNA) 5.2 The Customer Service Survey & Analysis

**Text & Reference Books:**

- Course Material Prepared by LSC

## OUTSOURCING IN E COMMERCE

Semester  
IVCourse Type  
CoreCode  
LEC2023Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To understand the role of Outsourcing in E-Commerce

**COURSE OUTCOME:**

The students will be able to:

- Understand how outsourcing works in E-Commerce
- Understand how to outsource strategic assessments
- Understand how to outsource Risk Management
- Future of E-Commerce Outsourcing

Unit	Topics
I	Introduction-- 1.1 What is Outsourcing? 1.2 Why do companies outsource? 1.3 When to Outsource? 1.4 How to implement outsourcing? 1.5 Problems with outsourcing
II	Ecommerce Outsourcing 2.1 What is Ecommerce Outsourcing? 2.2 How do Ecommerce Outsourcing help Business? 2.3 The Big Benefits of Outsourcing Your eCommerce 2.4 Best countries for Ecommerce Outsourcing and why?
III	Outsourcing Strategic Assessment 3.1 Business Value Assessment 3.2 Operational Assessment 3.3 Financial Assessment 3.4 Risk Assessment 3.5 Integrating the four risk elements
IV	Outsourcing Risk Management 4.1 Hidden Cost of Outsourcing 4.2 Models of Outsourcing 4.3 What risk are there with outsourcing? 4.4 Techniques and tools to assess risk
V	Future 5.1 Will outsourcing continue to grow in the years to come? 5.2 Future outsourcing trends 5.3 Future of outsourcing in India

**Text & Reference Books:**

1. Course Material Prepared by LSC

## FULFILMENT OPERATIONS

Semester  
IV

Course Type  
Core

Code  
LEC2024

Hours  
45

Credits  
3

Version  
2020-21

### COURSE OBJECTIVES:

- To understand the role of Fulfilment operations in E-Commerce

### LEARNING OUTCOMES:

The students will be able to:

- Understand the basics concepts of fulfilment operations in E-Commerce
- Understand the various operational models in fulfilment
- Explain the relationship between logistics and fulfilment services
- Understand the role of technology in fulfilment

Unit	Topics
I	<p><b>Introduction to fulfilment operations</b></p> <p>1.1 What is Fulfilment?</p> <p>1.2 Understanding ECommerce Fulfilment</p> <p>1.3 Logistics Organization Forms in E-Commerce</p> <p>1.4 Characteristics of Fulfilment Service</p>
II	<p><b>Fulfilment Models</b></p> <p>2.1 Fulfilment offered as a key service</p> <p>2.2 Fulfilment offered by sales platforms</p> <p>2.3 Fulfilment offered by logistics service providers</p> <p>2.4 Fulfilment offered by other market players</p>
III	<p><b>Logistics and Fulfilment Services</b></p> <p>3.1 Key Drivers</p> <p>3.2 Warehousing Aspects</p> <p>3.3 Freight Transit</p> <p>3.4 Packaging</p>
IV	<p><b>Technology in fulfilment</b></p> <p>4.1 Fulfilment Processes &amp; platforms</p> <p>4.2 E-Fulfilment and Customer retention strategies</p>
V	<p><b>Prospectus in Fulfilment</b></p> <p>5.1 Fulfilment of Bundled Orders using technology</p> <p>5.2 Mini Fulfilment via tech</p>

### Text & Reference Books:

1. Course Material Prepared by LSC

**PACKAGING FOR E COMMERCE**Semester  
IVCourse Type  
CoreCode  
LEC2025Hours  
45Credits  
3Version  
2020-21**COURSE OBJECTIVES:**

- To understand the concept of packaging E-Commerce

**COURSE OUTCOME**

The students will be able to:

- Understand the concept of packaging in E-Commerce
- Understand the types and functions of packaging
- Understand the concept of brand equity
- Explain the packaging journey.

Unit	Topics
I	<b>Introduction to packaging</b> 1.1 Brief Introduction 1.2 Definition of Key Terms 1.3 What is Packaging 1.4 The origins of packaging 1.5 Packaging and the Modern Industrial Society 1.6 The Modern Packaging Industry
II	<b>Types and Functions of Packaging</b> 2.1 Types of Packaging 2.2 Packaging Materials 2.3 The Functions of Packaging
III	<b>Understanding the Brand</b> 3.1 What is a Brand? 3.2 Elements that make up a Brand 3.3 Is there a difference between a Brand, a Product and a company? 3.4 Brand History 3.5 The marketing matrix 3.6 The basic brand development process 3.7 Guidelines for good brand management
IV	<b>The Concept of Brand Equity</b> 4.1 Motivations for Brand Equity 4.2 Rationale for Studying Brand Equity 4.3 Customer-based brand equity 4.4 Brand Knowledge 4.5 Guidelines for Managing Customer-Based Equity 4.6 Complementary Approaches to Measuring Customer-Based Equity 4.7 Asset Dimensions of Brand Equity 4.8 A five assets model of brand equity (Benefits of customer-based brand equity)
V	<b>The Packaging Journey in E-Commerce</b> 5.1 The journey 5.2 Consumer research 5.3 Order 5.4 Inbound logistics 5.5 Preparation of orders 5.6 Picking 5.7 Sorting 5.8 Packing 5.9 Shipment preparations 5.10 Outbound logistics 5.11 Order delivery and receipt 5.12 Returns

**Text & Reference Books:**

- Course Material Prepared by LSC

## REVENUE MANAGEMENT & PRICING

Semester  
V

Course Type  
Allied

Code  
LEA2001

Hours  
60

Credits  
2

Version  
2020-21

**COURSE OBJECTIVES:**

- To understand the concepts of Revenue management and pricing

**COURSE OUTCOME:**

- The students will be able to:
  - Understand the basics of Revenue and Risk management in Ecommerce
  - Understand the revenue management techniques
  - Explain how pricing is done in Ecommerce logistics
  - Understand the emerging issues in revenue and price management.

Unit	Topics
I	Introduction 1.1 What is Revenue Management 1.2 What is Pricing? 1.3 Difference between Revenue Management and Pricing 1.4 Role of Revenue Management in the Supply Chain
II	Revenue Management Techniques 2.1 Sale or Promotional Pricing 2.2 Price Matching 2.3 Markdowns 2.4 Unlimited use pricing 2.5 Overbooking 2.6 Bundling and unbundling 2.7 Free as a price 2.8 Customer Reward Programs
III	Pricing 3.1 Overview 3.2 Types of Pricing <ul style="list-style-type: none"> <li>a. Cost based pricing</li> <li>b. Market based pricing</li> <li>c. Value based pricing</li> <li>d. Customer based pricing</li> <li>e. Location based pricing</li> <li>f. Auction based pricing</li> </ul> 3.3 Pricing Strategies
IV	Pricing and Revenue Management in Supply chain 4.1 Conditions under which Revenue Management has the greatest effect 4.2 Revenue Management for multiple customer segments 4.3 Revenue Management for perishable assets 4.4 Revenue Management for Seasonal Demand 4.5 Revenue Management for bulk and spot customers
V	Emerging Issues in Revenue Management 5.1 The impact of Financial Reporting on Revenue Management 5.2 The Future of Revenue Management 5.3 Trends and Directions

**Text & Reference Books:**

1. Course Material Prepared by LSC

## PRINCIPLES OF CATALOGUING

Semester  
V

Course Type  
Allied

Code  
LEA2002

Hours  
60

Credits  
2

Version  
2020-21

### COURSE OBJECTIVES:

- To understand the concept of Cataloguing in E-Commerce

### COURSE OUTCOME:

The students will be able to:

- Understand the principles of Cataloguing
- Understand rules and authorities in Cataloguing
- Explain the technology infrastructure required for Cataloguing
- Understand different compliances in Cataloguing

Unit	Topics
I	<b>Principles of Cataloguing</b> 1.1 Different principles used in cataloguing 1.2 International Cataloguing Principles 1.3 Skills used in cataloguing 1.4 Building a Catalog Team 1.5 Strategies used in cataloguing
II	<b>Rules and Authorities</b> 2.1 Rules and Authorities 2.1 Regulatory authority and guidelines for cataloguing 2.2 Responsibilities of cataloguing authority 2.3 Rules for product cataloguing 2.4 Rules for Price Cataloguing 2.5 Interdepartmental Communication regarding cataloguing
III	<b>Information Technology Infrastructure</b> 3.1 Role of information analysis 3.2 Hardware and Software 3.3 Information Technology Security
IV	<b>MIS in Cataloguing</b> 4.1 Databases and Storage 4.2 Shelf life of product data 4.3 Expiry of data
V	<b>Compliances in Cataloguing</b> 5.1 Digital Repository 5.2 Cataloguing digital content as per job roles 5.3 Cataloguing digital content as per business verticals 5.4 Content Management system

### Text & Reference Books:

1. Course Material Prepared by LSC

## INVENTORY MANAGEMENT - PRACTICAL

<i>Semester</i> V	<i>Course Type</i> Practical	<i>Code</i> LEP2004	<i>Hours</i> 60	<i>Credits</i> 2	<i>Version</i> 2020-21
----------------------	---------------------------------	------------------------	--------------------	---------------------	---------------------------

Practical Exercises will be identified and assigned to students by company executives during Apprenticeship Training. Students would prepare a Practical Exercise Register, get it signed by company executives, and submit the same to the Collaborating Institutions for evaluation and Viva.

## WAREHOUSE MANAGEMENT - PRACTICAL

<i>Semester</i> V	<i>Course Type</i> Practical	<i>Code</i> LEP2005	<i>Hours</i> 45	<i>Credits</i> 2	<i>Version</i> 2020-21
----------------------	---------------------------------	------------------------	--------------------	---------------------	---------------------------

Practical Exercises will be identified and assigned to students by company executives during Apprenticeship Training. Students would prepare a Practical Exercise Register, get it signed by company executives, and submit the same to the Collaborating Institutions for evaluation and Viva.



## APPRENTICESHIP I

<i>Semester</i> V	<i>Course Type</i> Core	<i>Code</i> LEC2026	<i>Hours</i> 1008	<i>Credits</i> 22	<i>Version</i> 2020-21
----------------------	----------------------------	------------------------	----------------------	----------------------	---------------------------

The students would be onboarded in Logistics Processes of companies by the Logistics Sector Skill Council for Apprenticeship Training. The duration of Apprenticeship Training is 6 months. During Apprenticeship Training students would be assigned in live processes by companies. Being a legal engagement, students would receive a monthly stipend during Apprenticeship Training as per the existing norms.

On completion of the Apprenticeship Training, students shall submit Apprenticeship Report in the form of Work Diary to the Collaborating Institutions. The Report would be evaluated and Viva conducted by the Collaborating Institution.

**REGULATORY ENVIRONMENT OF E COMMERCE**Semester  
VICourse Type  
AlliedCode  
LEA2003Hours  
60Credits  
2Version  
2020-21**COURSE OBJECTIVES:**

- To understand the Regulatory Environment in E-Commerce

**LEARNING OUTCOMES:**

The students will be able to:

- Understand the regulatory environment in E-Commerce
- Understand legal issues and challenges in E-Commerce
- Explain the investment and regulations in E-Commerce
- Understand payment mechanism and taxation

Unit	Topics
I	Introduction: 1.1 Introduction 1.2 Business Models facilitated by e-commerce 1.3 Need for regulation of e-commerce in India 1.4 Legal validity of Ecommerce Transaction in India 1.5 Legislation on Ecommerce in India
II	Legal Issues and challenges faced by Ecommerce Businesses 2.1 Privacy 2.2 Intellectual Property 2.3 Free Speech 2.4 Taxation 2.5 Computer Crimes 2.6 Consumer Protection 2.7 Other legal Issues
III	Investment and regulations in the Ecommerce space in India 3.1 What constitute Ecommerce under the FDI Policy 3.2 Guidelines for FDI on Ecommerce 3.3 Recent Developments
IV	Payment Mechanism for Ecommerce 4.1 What is Ecommerce payment systems? 4.2 Advantages of ecommerce system 4.3 Types of Payment Methods in ecommerce
V	Taxation of Ecommerce Transaction- 5.1 Development in India and subsequent taxation of Ecommerce 5.2 Issues and Problems in Taxing Ecommerce Transactions 5.3 Current and Future trends in Ecommerce

**Text & Reference Books:**

1. Course Material Prepared by LSC

## INTERNATIONAL E COMMERCE

Semester  
VICourse Type  
AlliedCode  
LEA2004Hours  
60Credits  
2Version  
2020-21**COURSE OBJECTIVES:**

- To understand the aspects of International E Commerce

**COURSE OUTCOME:**

The students will be able to:

- Understand the Importance of international E-Commerce
- Understand Cross border E-commerce in detail
- Explain the import and export procedures in India
- Understand the cross-border markets, regulations.
- Understand the future of cross-border In India.

Unit	Topics
I	<b>Introduction:</b> 1.1 What is International Ecommerce? 1.2 Importance of International Ecommerce 1.3 Advantages of International Ecommerce 1.4 Challenges of International Ecommerce 1.5 What are the risks of International Ecommerce?
II	<b>Cross Border Ecommerce</b> 2.1 Why Online Sellers Should Expand Internationally? 2.2 When is a company ready to sell abroad? 2.3 How should a company determine market entry strategy? 2.4 How to identify market opportunities and create a sell forecast?
III	<b>Export and Import in India</b> 3.1 Export and Import procedure <ul style="list-style-type: none"> <li>➤ Commercial Invoice</li> <li>➤ Air Waybills</li> <li>➤ Bill of Lading</li> <li>➤ Bill of Exchange</li> <li>➤ Certificate of Origin</li> <li>➤ Packing List</li> <li>➤ Letter of Credit</li> </ul> 3.2 Steps Involved in the Processing of an Export Order 3.3 Import taxes and duties
IV	<b>Cross-border markets and common governance</b> 4.1 Benefits of cross border markets 4.2 International legislation in Ecommerce 4.3 International Ecommerce strategy 4.4 Impact of Ecommerce on international trade
V	<b>Future of Cross Border Ecommerce</b> 5.1 Emerging Trends in Cross Border E-commerce that Define the Future of Retail 5.2 Why Is Cross-Border E-Commerce the Future Of E-Commerce Industry? 5.3 Why Cross-Border E-Commerce Will Be Crucial to the Future of Manufacturing

**Text & Reference Books:**

- Course Material Prepared by LSC

## MIS FOR E COMMERCE - PRACTICAL

<i>Semester</i> VI	<i>Course Type</i> Practical	<i>Code</i> LEP2006	<i>Hours</i> 60	<i>Credits</i> 2	<i>Version</i> 2020-21
-----------------------	---------------------------------	------------------------	--------------------	---------------------	---------------------------

Practical Exercises will be identified and assigned to students by company executives during Apprenticeship Training. Students would prepare a Practical Exercise Register, get it signed by company executives, and submit the same to the Collaborating Institutions for evaluation and Viva.

## FULFILMENT OPERATIONS - PRACTICAL

<i>Semester</i> VI	<i>Course Type</i> Practical	<i>Code</i> LEP2007	<i>Hours</i> 60	<i>Credits</i> 2	<i>Version</i> 2020-21
-----------------------	---------------------------------	------------------------	--------------------	---------------------	---------------------------

Practical Exercises will be identified and assigned to students by company executives during Apprenticeship Training. Students would prepare a Practical Exercise Register, get it signed by company executives, and submit the same to the Collaborating Institutions for evaluation and Viva.

## APPRENTICESHIP II

<i>Semester</i> VI	<i>Course Type</i> Core	<i>Code</i> LEC2027	<i>Hours</i> 1008	<i>Credits</i> 22	<i>Version</i> 2020-21
-----------------------	----------------------------	------------------------	----------------------	----------------------	---------------------------

The students would be onboarded in Logistics Processes of companies by the Logistics Sector Skill Council for Apprenticeship Training. The duration of Apprenticeship Training is 6 months. During Apprenticeship Training students would be assigned in live processes by companies. Being a legal engagement, students would receive a monthly stipend during Apprenticeship Training as per the existing norms.

On completion of the Apprenticeship Training, students shall submit Apprenticeship Report in the form of Work Diary to the Collaborating Institutions. The Report would be evaluated and Viva conducted by the Collaborating Institution.





**LOGISTICS SECTOR SKILL COUNCIL**  
'Temple Towers', Ground Floor  
476, Anna Salai, Nandanam, Chennai - 600 035, India  
[www.lsc-india.com](http://www.lsc-india.com)